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Educational Prevention Program of Surgical Site Infections (SSI) at a Metropolitan Pediatric

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Statement of the Problem

A surgical site infection (SSI) is an infection that occurs after a surgery in the part of the body where it was performed (Centers for Disease Control and Prevention, 2018). The infection is superficial which involves only the skin initially but can spread to other parts of the body toward organs. In the hospital setting SSIs are the most common type of healthcare associated infections, which account for 31% of hospitalized patients (Center for Disease Control and Prevention, 2018). Throughout the U.S it is estimated that the incident of SSIs ranges from 160,000 to 300,000 a year and estimated costs include $3.5 to $10 billion annually (Science Daily, 2017). SSIs are associated with increased morbidity and mortality, increased length of stay and increased health care costs. Improvements have been made with infection control practices and sterile techniques but it is not enough to make a significant difference. SSI rates have increased because there are more operative procedures performed in the United States, which leads to more chances of SSI Incidences.

The occurrence of an SSI is a preventable issue and can be detrimental to patients and reflects the professionalism of the healthcare organization. The occurrence of an SSI can prolong hospital stay for 7 to 11 days, which leads to financial burdens and inefficiency. SSIs occur all across the country and can occur in any patient regardless of age and sex. In order to prevent SSI both patient and healthcare provider must follow sterile protocols and upkeep hygiene. The most vulnerable population is the pediatric patients because of the education barrier. There are number of factors that cause SSI which include age, location of the operation, type of operation, wound class, medication adherence, and hygienic compliance (WHO, 2016). Risk factors are not efficiently mitigated because of insufficient implementations of quality improvement measures. Hygiene is an ongoing risk factor in SSI cases and needs to be constantly cared for.

For a lot of pediatric patients and families, resources and education is limited, effecting hygiene practices in a negative direction. This leads to an increase risk for SSI and puts the pediatric patients at a major health risk (WHO, 2016).

At a large, metropolitan pediatric hospital, it is reported they have an increase of SSI rates in the pediatric units who are undergoing invasive surgeries. The Hospital has 334 beds and provides pediatric services for over two million children. Quality Improvement measures are needed to help aid the hospital in efficient care and practices. In order to address the issue of SSIs a microsystem needs assessment was conducted. Through the microsystem needs assessment, education handouts were found to be underused and not highly enforced. Educational pamphlets are given out to families only explaining the importance of oral care and chlorhexidine gluconate baths. None of the pamphlets included information on home hygiene practices or provided resources for parents on how they could be an important role in their children's care and hygiene preoperatively. With the current rise of SSIs and limited educational resources for parents it is necessary to conduct a CNL quality improvement project to help reduce SSI rates and improve the comprehension of educational prevention programs to enforce efficiency.

Rationale

In the preoperative services nurses were interviewed and a microsystem assessment was performed. Nurses were asked to discuss issues in their microsystem that occur in day-to-day care. A root cause analysis was constructed to gain a better understanding of the unit and its problems. Through the root cause analysis it was found that this quality improvement was needed. The root cause of increased SSIs included environmental gaps, insufficient time, lack of education, patient demographics and patient characteristics (Please view Appendix A). After

analyzing the root cause analysis and microsystem assessment the main issue that was spotlighted was the lack of depth of education for patients and parents. Parents were not provided adequate information on SSI prevention, hygiene, and proactive measures. Pediatric patients are a vulnerable population before, during and after surgery; therefore care must be optimized through the use of healthcare professionals and parents. Overall parents and families must be educated on effective and efficient hygiene practices for their children so that surgical outcomes could be optimized aiming towards decreased SSI rates (Ban, Minei, Laronga, Harbrecht, Jensen, Fry, & Duane, 2017).

Literature Review

A literature review was used to document evidence-based research on SSI prevention, practices, and current SSI issues to support the need for education on hygiene practices. The literature review contains information from PubMed, CINHAL, Google Scholar, and Fusion. In this research keywords that were used include; prevention, SSI, hygiene, bathing, showering, patient education, pediatrics, infections, hospitals, disease, and family education. This search was limited to research articles that were published in the last 10 years. The time frame ranges between 2008-2018. Articles include meta-analysis, systemic reviews and randomized prospective analysis to enforce supplemental research and current evidence based practices.

In a systematic review by Kamel, McGahan, Polisena, Mierzwinski-Urban, and Embil (2012), it stated that preoperative showers are a great way to eliminate bacterial growth and can prevent SSIs. With the use of both showers and antiseptic wipes chances of SSIs are significantly reduced. Through out January 2001 and June 2011 twenty studies were used to determine the effectiveness of preoperative skin antiseptics in a total of 9,520 adult and pediatric patients. In

the two cohort studies it was reported that there was a decrease in infection rates for patients who cleaned with chlorhexidine cloths. Bathing preoperatively and using antiseptics also resulted in a significant decrease in pre surgical colonization founded through the use of two randomized-controlled trials. However the literature did not specify which antiseptic is most effective but rather focuses on protocols to prevent SSIs.

In another study a randomized prospective analysis was developed to evaluate preadmission bathing protocol while using chlorhexadine clothes. The study was limited because one-third of the patients did not complete the preadmission shower protocols. This displayed a need for patient compliance preoperatively and the delivery of educational guidlines. The study aimed to decrease risks for SSI and suggested that all patients preoperatively should take two showers with chlorhexadine clothes accompanied with a text, email or phone call to remind the patient of hygiene compliance (Edmiston et al, 2015). This study demonstrates the effectiveness of preoperative hygiene and chlorhexadine usage and it's successfulness in reducing the risk of an SSI. Overall this study further supports this educational program by displaying the importance of hygiene and preoperative protocols in regards to a decrease SSI rate.

According to Kapadia, Zhou, Jauregui, and Mont (2016) a study of 3717 individuals who went in to the hospital for a TKA, 991 patients used chlorhexidine cloths and 2726 patients did not. Patients received a thorough education course on proper hygiene and results of lack of compliance. In conclusion chlorhexidine cloths reduced the risk of infection in the medium and high-risk category. Further evaluation will be conducted to elaborate on the preliminary study to evaluate the efficiency of chlorhexidine cloths. This study highlights the effectiveness of chlorhexadine clothes and compares it to regular soap and water. The risk of infection is greater

with soap and water but it is not a significant difference. This further supports a need to shower preoperatively alongside chlorhexadine cloths to further reduce SSI risks.

According to the Centers for Disease Control (2018) patients should shower with an antiseptic agent, which include antimicrobial or non-antimicrobial soap. Patients should shower the night before the scheduled surgery so that the risk of SSI is decreased. These hygiene protocols were developed using a systematic review of MEDLINE, EMBASE, CINAHL, and Cochrane Library. Now these protocols are an important practice that has been accepted for the prevention of SSI throughout different healthcare facilities. With the support of the CDC's specific guidelines for SSI reduction this educational program made use of the requirements to further aid research and the implementation of an educational pamphlet.

According to a study by Anderson, Ottum, Zerbel, Sethi, Gaines & Safdar (2013), it was found, from a generated survey of 50 surgical patients, that 26% of them believed education on SSI prevention should be improved with a frequent reminder and more educational materials that are comprehensible. 40% of participants did not recall receiving an educational lesson about SSIs or received any educational pamphlets. Overall this study spotlights the need to better educate patients on SSI preventions and protocols. When patient engagement is lacking the risk of SSI is greatly increased. This study is used to further support the need of educational tools for SSIs.

According to Badarudeen & Sabharwal (2008), patient education materials readability should be lower than a sixth-grade level but their findings showed that only 2% of the pediatric orthopedic patient education materials were under the 6th grade reading level. Findings also suggest that most pediatric units across the United States have limited education material available, which ultimately makes comprehension very difficult for underserved populations within the United States. This literature was used to guide the educational pamphlets and to

ensure the reading level is comprehensible. With a more comprehensive and user-friendly pamphlets, education will be more accessible for the patients ultimately increasing preoperative compliance.

The pivotal points of these studies stress how important education and empowering patients is. Through the use of education and empowerment families can protect their health specifically from SSIs Edmiston et al. (2014). Ways that this could be accomplished is through the use of proper preoperative planning and effective communication between healthcare provider and patient. It is essential that healthcare providers and patients demonstrate this through their healthcare exposure. Education must be delivered at the patient's level of comprehension and with the use of an effective educational plan patient outcomes could be optimized.

Cost Analysis

The cost of an infection at a metropolitan pediatric hospital estimates about $3,269 per infection. SSI can have detrimental complication for the patient and result in higher daily hospital charges by increasing the length of stay and a higher 30-day readmission rate. If Hospitals focus on SSIs and protocols to mitigate these issues spending will be decreased, leading to more available resources for other hospital needs (Zimlicham, Henderson, Tamir, et al., 2013). SSI protocols can help improve spending in the hospital setting if done efficiently. In a patient diagnosed with a SSI, charges for a 10-day length of stay estimates about $79,000 in spending. Through prevention protocols that length of stay could of been reduced to 5 days and reduce spending to under $45,000.

Using the evidence from literature and current Metropolitan Pediatric Hospital data an educational SSI prevention program would be beneficial to the Metropolitan Pediatric Hospital

and other hospitals who are trying to improve toward magnet status. Thorough analysis of the program will be conducted throughout the implementation process of educational programs to patients. Staffing ratio, bed turnovers, treatment cost, LOS and other measures will be used to evaluate the effectiveness of the program and it' cost. Through this process results will help further guide quality improvement measures enforcing a culture of continuous growth and improvement.

Clinical Microsystem Assessment

Hospital Assessment

The large metropolitan hospital holds about 334-beds for pediatric patients and cares for over two million children across a large platform of counties. The hospital provides care to a variety of individuals whose age ranges between neonate and 21 years old. In some instances the hospital cares for 21-25 year olds depending on the diagnosis. According the infection control team it has reported an increase in Surgical Site Infections. Common procedures affected by this include spinal, neurological and heart surgeries. The Pediatric Clinical Nurse Specialist suggested quality improvement measures should be implemented with the help of Clinical Nurse Leader (CNL) students. The students focused on providing patient education on how to efficiently and effectively practice hygienic duties before during and after surgery. The current educational protocols are limited and written information does not meet CDC health literature requirements. Therefore a team of CNL students conducted a 5 P's assessment, which includes purpose, patients, professionals, patterns and process to learn about the microsystem so that a well developed, and effective improvement plans could be constructed.

Purpose

The purpose of the large metropolitan pediatric hospital is to nurture, protect the health of all children, assist and enrich existing services so that families and patients could benefit from it. Overall the goal of this hospital is to deliver patient and family centered care to make the surgical process easier for families, patients, and healthcare providers. The focus is on providing support for patient recovery and delivering optimal care to reach optimal outcomes.

Patient

Patients admitted to and treated on units of the Operative Services range from neonates to young adults up to 19 years old. In the County located around the Metropolitan Pediatric Hospital the demographics range between each culture, 30.7% Caucasian, 47.2% Hispanic, 15.7% Asian, 1.5% black, and 4.9% others. Also 46% of households in the county speak another language as a primary language and out of that total 58.6% speak Spanish, and 30.5% speak an Asian or Pacific Islander language (CDC, 2018). Further more 68.9% of children between the ages of 0 and 17 years old receive care at a doctor's office or Kaiser while 23% receive care at a community hospital or other clinic. Common issues in the hospital setting are language barriers between healthcare provider and patient (CDC, 2018). With a diverse population it is imperative that the healthcare facility meets the needs of the population. These challenges effect healthcare in a negative direction if not addressed and can lead to more spending and waste of resources.

Professionals

Professionals in the microsystem of the Metropolitan Pediatric Hospital consisted of nurses, physicians, surgeons, nursing assistants, surgical technicians, and administrative employees. The

number of employees per day ranged per unit because of operational hours and number of operation during the day.

Processes

In order to meet the needs of a variety of patients the process of patient care is individualized depending on the type of surgical procedure and treatment. The initial process for patients occurs when the patient is admitted into the preoperative unit as a patient. There the patient will be assessed, medical documents collected, procedure education will be initiated and consent must be given to continue on with the operative process. Patients will then receive surgery in the Operative Room in which sterile technique is put at a priority. Finally, after the surgery is complete the patient is transferred to the Post-Anesthesia Care Unit where they will receive postoperative treatments and care from the healthcare teams. The educational process is limited because only two PAT nurses are making pre-operative calls to remind the patient of their upcoming surgery and preoperative instruction. There are no educational instructions provided over the phone regarding hygiene practices and protocols preoperatively.

Patterns

The microsystem holds accountable interdisciplinary teams to provide high quality care and safety so that optimal outcomes can be achieved. The model for delivery of care revolves around the patient and family centered care. The microsystem strives to improve care by eliminated mistakes regarding pediatric patient SSI and illnesses. The main things the microsystem focuses on are education and communication between healthcare members and families. Patients and families are centered in the plan of care and a step-by-step process is provided to optimize patient outcomes.

Methodology

Needs Assessment

A tour was taken of the pediatric units, followed by an interview with the OR nurses on the floor and the charge nurse. The needs of the perioperative services were assessed through formal discussion with a PCNS, a unit tour, interviews with OR nurse on the floor, and interdisciplinary formal discussions with a PCNS to assess the needs of the perioperative services. After discussing what was observed through these assessments a Root Cause Analysis was created to organize thoughts and prioritize problems. The OR nurses and charge nurse were a reliable source to gather ideas based on their current unit practices and collective recommendations. The assessments and information collected was discussed with the PCNS. Through teamwork and effective communication a thorough analysis was conducted. The current issue that was identified was patient hygiene status, lack of education, and lack of discharge protocols, which would include an educational packet to take home. It is imperative that educational tools are created upon assessment and adequate hygiene education is delivered at the patient's level of literacy. In order to fully understand the problem an audit tool survey was created and distributed to the nurses on the preoperative units. The audit tool will gather information about the patient's hygiene status and compliance of protocols. The audit tool survey will allow baseline data to be configured and compared to patient hygiene results before and after the implementation of the educational protocol.

Validation Audit Tool Survey

Through the suggestion of the OR nurses and charge nurse on the preoperative units an audit tool was created. This tool would be used to determine the hygiene status of the patients before surgery. The audit tool surveys ask nurses to make a subjective assessment of the patient's

hygiene status through the use of yes or no questions. 60 audit tool surveys were distributed to the nurses on the floor and were educated on the purpose of the audit tools and were given instructions on how to use the surveys. At the beginning of the nurse's shift in the preoperative units the surveys were distributed to each nurse and were asked to do one for every patient. The audit tool surveys were completed at random and the data that was collected was analyzed so that priorities could be identified. (See Appendix B for audit tool survey example)

Implementation of Educational Tools

With the use of the microsystem assessment and the use of the data collected from the audit tool surveys, educational tools were constructed to address the main needs of patients at risk for SSIs. An educational tool was the first implementation and included an educational piece on SSIs at low literacy levels. This was used to optimize patient education and mitigate confusion and miscommunication. This pamphlet also included effective and efficient guidelines for parents on how to appropriately bathe their child or teach their child to bathe. Educational levels of the general population were taken into heavy consideration because of the detrimental outcomes from noncompliance. With the help of the CDC recommendations the educational pamphlet was clear and concise. After editing and finalizing the educational pamphlet, it was submitted to the education committee of the metropolitan pediatric hospital to be approved. After approval the pamphlet will be mailed to patients homes prior the their surgery so that families and the patients could play a proactive role in preventing SSIs. (See Appendix C for the educational pamphlet)

Another tool was created to help mitigate SSI occurrences, which included pre-operative phone calls. A script was developed for Pre-Anesthesia Teaching nurses to follow during the preoperative phone call check up. The script entailed two questions and instructions on how to

bathe appropriately. The reason for these preoperative phone calls and scripts was to assess if the educational pamphlets were received and if the information on it was comprehensible. The use of preoperative phone calls serves as an opportunity for patient assessments and address concerns of the patients. (See Appendix D for preoperative phone call script). With the implementation of both educational tools patient awareness, engagement, and knowledge will grow followed by a reduction in SSI rate.

Timeline

The implementation of this educational program started in May of 2018 and will end in December of 2018. This project will consist of two research groups participating in the educational program. The first 4 months will be implemented through the initial CNL student and the last 4 months will be finished with another team of CNL students. In order to collect and organize the data periodically a Gantt chart was created to project as a management tool for both CNL student groups. The initial CNL students began the quality improvement project with the use of team meetings, research, and microsystem needs assessment within the first month of the educational program. The Initial CNL students also developed, revised and distributed audit tools during the second month of the educational program. Once all the data was collected from the audit tools additional research was done to compare the results found. In the third month an educational pamphlet was introduced into the microsystem and was constructed using CDC requirements for educational needs. Through out the third and fourth month the educational pamphlets will be continuously distributed. After the 4-month time period the second team of CNL students will redistribute another audit tool to be collected, analyzed and evaluated to see if any improvements have been made. (See Appendix E for Gantt Chart)

Results

Expected Results

The purpose of this project was to collect data on preoperative protocols to better understand the hygiene in surgical pediatric patients and importance of this educational project. The results of the constructed audit tools would provide baseline data on whether the child is clean or unclean preoperatively. Measures that were used in the audit tool included cleanliness of the cloths, skin, hair, nails, and alcohol clothes at IV insertion sites. This part of the tool would determine if any of the mentioned categories are clean or unclean by marking yes or no for each topic. If there were presence of dirt or oil the nurse would mark unclean. There was also a supplemental question, which asked "Did the patient receive a bath/shower within the last 12 hours?". This supplemental question is expected to help in determining the patient's compliance with preoperative instructions and their engagement in SSI reduction and prevention.

The audit tool being used will be implemented in two periods of the educational prevention program for SSI. The expected results of the first audit tool would express that a large number of patients will have dirt, soil, or grease in one or more category and be deemed unclean. After the implementation of the educational pamphlet and a raised awareness of the situation in the hospital setting parents and patients will feel more empowered because of an increase in autonomy. After a period of time the audit tools will be redistributed to see the positive effectiveness of the educational program. The second audit is expected to show patients having less visible oils and dirt because the educational tools were utilized. The supplemental question will also move toward a positive direction because of the pre operative phone calls and scripts reminding patients to bathe before coming in for surgery. By optimizing both resources this educational plan will increase the baseline knowledge for families and patients so that they could play a role in SSI reduction. When patients understand and comprehend SSI prevention protocols

hygiene practices will be performed efficiently and effectively. Patients who are well informed are more compliant and will result in a lower SSI rate. The overall goal of this project is to spread awareness to the general population and reduce SSI rates at the pediatric metropolitan hospital.

Actual Results

The results of the audit tool assessment resulted with significant and valuable data that supports the need for this quality improvement project. A total of 60 audit tools were completed from June 4th to June 28th, 2018 in a pediatric preoperative unit. The Team of CNL students analyzed clean and unclean categories such as clothes, skin, hair, nails and alcohol pads. If there was a yes in any of the categories it meant that, that category was deemed unclean. If in the categories a "no" was inputted then it was defined as clean. An unclean patient is defined as "yes" for visual cleanliness in any categories and/or "no" for showering within the last 12 hours. A clean patient is defined as NO in all categories and yes for showering within the last 12 hours. The data collected from the initial audit tool presented 28 out of 60 patients were defined clean, 12 out of the 60 patients were deemed unclean and 20 out of the 60 patients had an N/A in any part of the audit tool.

Nursing Relevance

This study will make a large contribution to the nursing workforce. One way it will benefit is by educating nurses on how to appropriately educate their patient preoperatively to reduce SSIs. This project exposes a preventable issue in any hospital setting. Healthcare literacy is low throughout the country and if a prestigious pediatric metropolitan hospital has complications with patient compliance and SSI rates there are more likely other facilities in need of quality

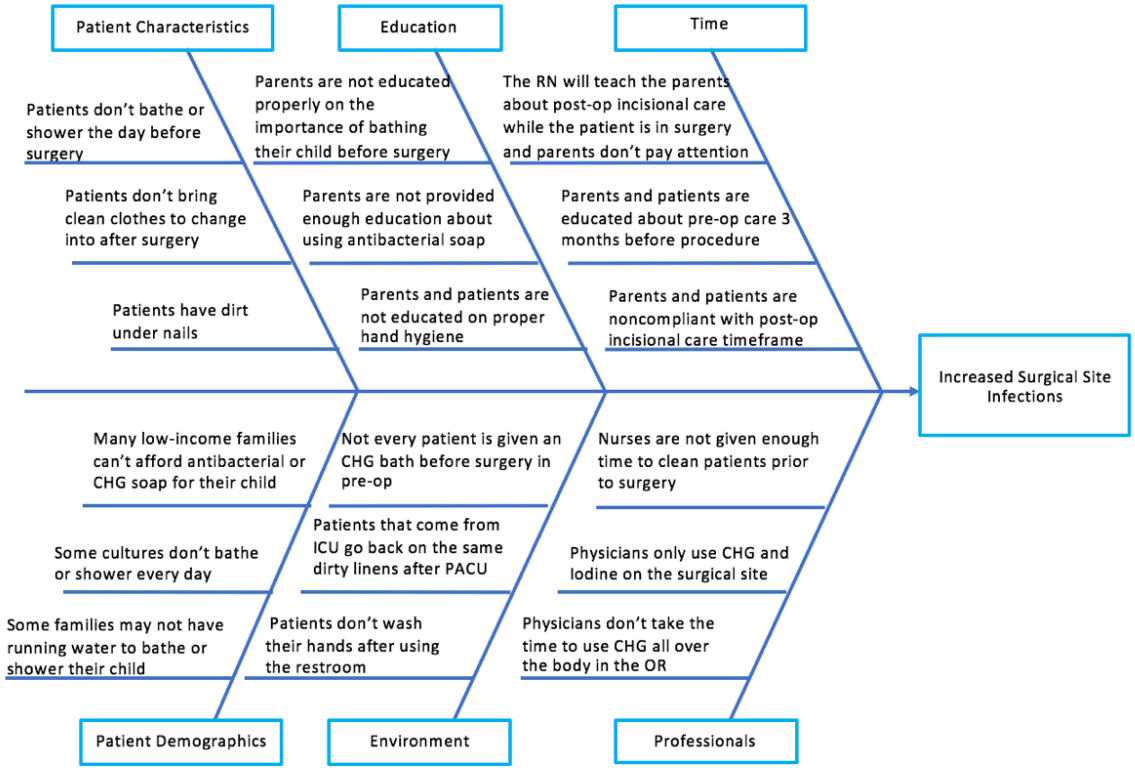
improvement measure (Zellmer, Zimdars, Parker, & Safdar, 2014). In the nursing profession it is ideal to strive for an environment of continuous quality improvement. The mission for all nurses should be patient advocacy and quality improvement. In addition this project can be used as a guideline for other healthcare facilities to improve patient care and reduce unnecessary spending on preventable issues. Finally, using this framework will help aid other healthcare professionals in constructing their own quality improvement methods for their healthcare facility.

CNL Relevance

The project is best carried out by CNLs because of their high level of critical thinking, microsystem assessment skills, communication skills and the ability to identify problems. CNLSs are also skilled in conducting quality improvement measures with the use of evidence base practices. They are trained to work in any microsystem by immersing themselves and gathering data to assess priorities and needs (CNL, 2013). CNLs will make a major contribution in the clinical environment because of their focus on continuous improvement and patient centered care. CNL students in this project worked alongside the charge nurse, nurses in the preoperative units and the Pediatric Clinical Nurse specialist. With effective and efficient communication and through the use of teamwork both CNL students and healthcare professionals worked together to reach optimal outcomes and overall improve patient center care which could reduce spending at the pediatric metropolitan hospital.

Appendix

A.


Patient Characteristics
Education
Time
Patients don't bathe or shower the day before surgery
Parents are not educated properly on the importance of bathing their child before surgery
The RN will teach the parents about post-op incisional care while the patient is in surgery and parents don't pay attention
Patients don't bring clean clothes to change into after surgery
Parents are not provided enough education about using antibacterial soap
Parents and patients are educated about pre-op care 3 months before procedure
Patients have dirt under nails
Parents and patients are not educated on proper hand hygiene
Parents and patients are noncompliant with post-op incisional care timeframe
Increased Surgical Site Infections
Many low-income families can't afford antibacterial or CHG soap for their child
Not every patient is given an CHG bath before surgery in pre-op
Nurses are not given enough time to clean patients prior to surgery
Some cultures don't bathe or shower every day
Patients that come from ICU go back on the same dirty linens after PACU
Physicians only use CHG and Iodine on the surgical site
Some families may not have running water to bathe or shower their child
Patients don't wash their hands after using the restroom
Physicians don't take the time to use CHG all over the body in the OR
Patient Demographics
Environment
Professionals

B.

Date/Time:_____

Pre-Operative Unit – SSI Prevention Assessment Tool
(USF School of Nursing and Health Professions)

Please circle the best response to describe your patient's general appearance. Please assess the presence of dirt, soil, grease, on the following:	
	Yes= Visible dirt, soil, grease, etc No= Clean and neat
Clothes	YES / NO
Skin	YES / NO
Hair	YES / NO
Nails	YES / NO
Excessive dirt on alcohol pad at IV insertion site	YES / NO

Supplemental Question:

1. Did the patient receive a bath/shower within the last 12 hours? YES / NO

C.

Preventing Surgical Site Infections at Home

The handout you received called "FAQs about Surgical Site Infections" explains what a surgical site infection is, and some of the things that hospitals (including CHOC Children's) are doing to prevent them. This handout will explain the important role you can take in protecting your child's health and steps you can take to reduce their risk of a surgical site infection.

What is a Surgical Site Infection?

- Surgical site infections occur when germs get in the surgical wound
- SSIs can increase the length of time your child stays in the hospital and lead to further health complications
- Many SSIs are caused by the same germs that normally live on our skin

How can I help prevent a Surgical Site Infection?

Before your child's surgery:

- Tell your child's doctor about any medical problems your child may have.
- Decrease exposure to smoke. Patients who smoke, or are exposed to smoke, get more infections.
- If your child shaves, they should not shave near the area where they will have surgery. Shaving with a razor irritates skin and makes it easier for germs to enter.
- Give your child a shower the night before or morning of their surgery.
  - It is normal for germs to live on our skin, showering removes some of those germs which may lower the risk of infection.
  - It is very important to use clean linens (washcloths, towels, clothes/pajamas, bed sheets and blankets) after you shower your child. Using linens that haven't been freshly washed could transfer more germs on to your child's skin.
  - If the doctor has given you specific instructions and special soap, follow those instructions. If not, follow these steps to make sure you are removing as many germs as possible:
    1. Wash and rinse hair using normal shampoo
    2. Use soap and warm water to form bubbles on a clean washcloth or your hands
    3. Scrub the entire body to remove dirt. Don't scrub too hard- you don't want to irritate or break the skin
    4. Pay special attention to the neck, under arms, nails, breasts, feet, groin, and any other skin folds
    5. Rinse the soap completely using warm running water
    6. Pat the skin dry with a clean towel
    7. Do not put anything on the skin after washing. No lotion, cream, powder, or perfume
    8. Dress with clean clothes or clean pajamas
    9. Place clean, freshly washed sheets on the bed so no germs get back on the skin

At the time if your child's surgery:

- Speak up if someone tries to shave the surgical site with a razor. Shaving with an electronic clipper is safe because it does not irritate the skin. Talk with your surgeon if you have any concerns.
- Ask if your child will get antibiotics before surgery.

After your child's surgery:

- Make sure all hospital staff members clean their hands before examining your child. If you do not see them clean their hands, please ask them to do so.
- If your child can understand, teach them not to touch their surgical wound.
- Before you go home from the hospital, make sure you understand how to care for the wound. Ask the nurses or surgeon if you have any questions or concerns.
- Always clean your hands before and after caring for the wound.
- Make sure family and friends clean their hands before and after visiting your child. Friends and family should not touch the surgical wound or dressing.
- Before you go home from the hospital, make sure you know who to contact if you have questions or problems.
- Look for signs of an infection- If you see any redness, drainage or pus, or if your child gets a fever, call your doctor immediately.

Please contact the CHOC's Children if you have any questions regarding these instructions.

D.

Bathing Instruction Script for PAT nurses

Did you receive Preventing Surgical Site Infection at Home pamphlet?

Do you have any questions? (If answer is yes, see instructions below)

Before your child's surgery:

1. Wash and rinse hair using normal shampoo
2. Use soap and warm water to scrub the entire body to remove dirt. Pay special attention to the neck, under arms, nails, breasts, feet, groin, and any other skin folds
3. Rinse the soap completely using warm running water
4. Pat the skin dry with a clean towel. Do not put anything on the skin after washing. No lotion, cream, powder, or perfume
5. Dress with clean clothes or clean pajamas. Place clean, freshly washed sheets on the bed.

E.

1	**USF Surgical Site Infection Prevention Project Gantt Chart**								
2	Group members: Daniel Chavez, Myra Hasan, Christina Peppard, Khanh Cao, Carena Leung								
3		2018							
4		Summer				Fall			
5	**Tasks/Details**	May	June	July	Aug	Sept	Oct	Nov	Dec
6	Meet with Preceptor Juleah Walsh and discuss quality improvement project								
7	Research literuature on hygiene practices								
8	Tour of Pre-Op unit and interview nursing staff								
9	Microsystem assessment								
10	Group meeting to discuss goals and objectives								
11	Develop and distribute an audit-tool to gather baseline data								
12	Collect audit data								
13	Create educational pamplet								
14	Develop root cause analysis								
15	Health Literacy Module								
16	Edit educational pamplet								
17	Data analysis of audit-tool								
18	Finalize education pamphlet								
19	Distribute education pamphlet								
20	Gather data of patients who have received the educationl pamphlet								
21	Analyze data								
22	Evaluate effectiveness of educational pamphlet								

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